Installation Manual & User Instructions

For

MultiCom 100 / 500

Multi apartment GSM Intercom System

WARRANTY VOID!

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1. Introduction

This GSM intercom uses the cellular networks to dial pre-programmed telephone numbers when an apartment number is called or family name is selected from the directory.

The 100 unit will dial up to 2 numbers for 100 apartments, dialling one number, then the second number. The 500 model will dial 3 numbers for 500 apartments. These numbers can be fixed line telephones or mobile cell phones or both.

Any phone which receives a call from the intercom can activate a built in relay, which can be connected to an electric door release or automatic gate system.

2. Getting Started

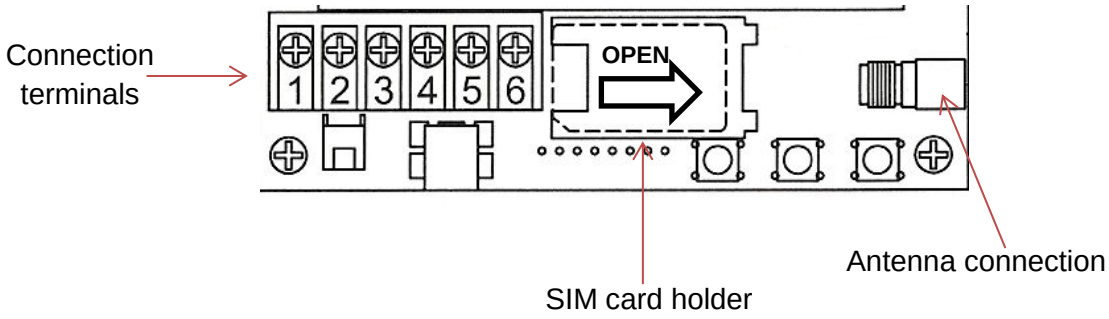
1) Before installing the unit on site, PROGRAM AND TEST IT ON A BENCH. This system should only be installed by an access control professional, according to the wiring, fire and security regulations of your country. The system will not be covered under warranty by improper installation.
2) Use the keys supplied to open the front door to allow access.

3. SIM Card

1) The 100 model will operate on a standard 2G network. The 500 unit will also work on a 3G network as well as 2G.
2) For multi apartment systems experiencing heavy use, it may be advisable to purchase a contract SIM card with inclusive monthly minutes in a calling plan. A data

is not a requirement. The intercom calling time can be set to limit the calling time for each use, which will help ensure lowest possible calling times.

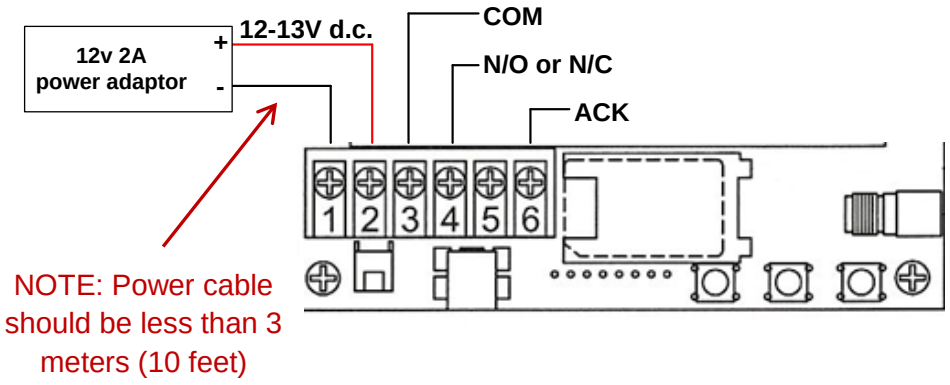
3) Ensure the SIM card has calling credit, and can make and receive voice calls in a mobile phone.
4) If the SIM has a pin code request active, disable this in a phone first.
5) If the SIM card was purchased along with a phone, then it may be locked to that phone. Ask your network provider to unlock the SIM so that it can be used in another device.
6) Insert the working SIM card and connect the antenna as shown below BEFORE connecting the power.



4. Wiring

Connect power to the unit as per diagram below.
Notes:

1) Do NOT use any other power supply other than the type supplied with the device.
2) Do not install the power supply more than 3 meters (10 feet) away from the intercom, otherwise voltage drop and noise on the power cables will cause unstable operation.
3) Do NOT connect this power supply to any electric locking device. Electric locks should be powered from their own power adaptor.



TIP: Current draw when in operation spikes at up to 2 amps. Do not use alarm cable or CAT5 cable to connect power to this device. Use minimum 0.75mm or greater cable diameter.

5. Keypad / On Screen Programming

To use the keypad programming method, the following keys are used…
F1 = Menu / Exit
F2 = Delete
F3 = Change abc/ABC/123 function key
* = UP
# = Down
= Enter / select

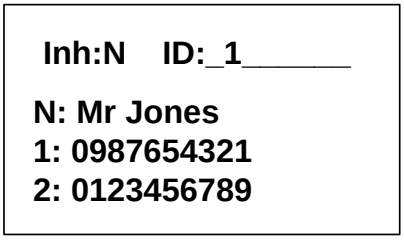
6. Adding Subscribers

To add a subscriber, first you must enter programming mode….

1) Press F1
2) Enter the default programmers code 123456
3) Press the bell / call button
4) Press * or # to select SUBSCRIBER
5) Press the bell / call button to select

6) The screen will look like this..
You may enter a flat or apartment address which can be between 1 and 6 digits long.
7) Press the bell / call button to proceed.

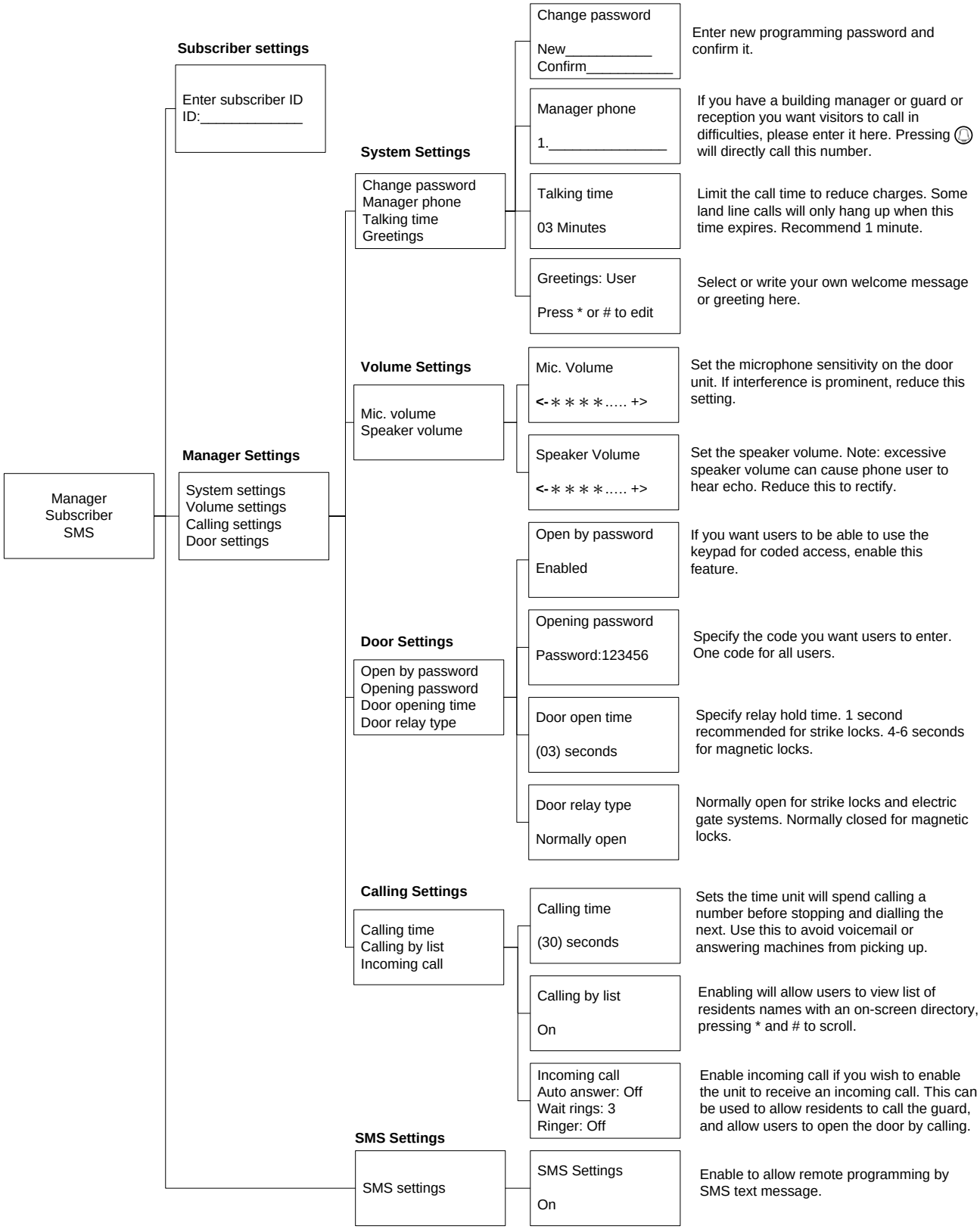
8) The screen will change to this. You can now enter individual name and telephone numbers for each subscriber. Move the cursor position by pressing * or #.
Use F3 to change from capital letters to small letters and numbers.



Use F2 to delete, call button to confirm, and F1 to exit again. 0 key can be used to insert a space.

7. Programming Engineering Features

Under the manager settings, the diagram below illustrates the settings which can be made on the unit…


Manager
Subscriber
SMS
Manager Settings
System settings
Volume settings
Calling settings
Door settings
Subscriber settings
Enter subscriber ID
ID:_____
System Settings
Change password
Manager phone
Talking time
Greetings
Change password
New_____
Confirm_____
Enter new programming password and confirm it.
Manager phone
1._____
If you have a building manager or guard or reception you want visitors to call in difficulties, please enter it here. Pressing will directly call this number.
Talking time
03 Minutes
Limit the call time to reduce charges. Some land line calls will only hang up when this time expires. Recommend 1 minute.
Greetings: User
Press * or # to edit
Select or write your own welcome message or greeting here.
Volume Settings
Mic. volume
Speaker volume
Mic. Volume
<-∗∗∗∗….. +>
Set the microphone sensitivity on the door unit. If interference is prominent, reduce this setting.
Speaker Volume
<-∗∗∗∗….. +>
Set the speaker volume. Note: excessive speaker volume can cause phone user to hear echo. Reduce this to rectify.
Door Settings
Open by password
Opening password
Door opening time
Door relay type
Open by password
Enabled
If you want users to be able to use the keypad for coded access, enable this feature.
Opening password
Password:123456
Specify the code you want users to enter. One code for all users.
Door open time
(03) seconds
Specify relay hold time. 1 second recommended for strike locks. 4-6 seconds for magnetic locks.
Door relay type
Normally open
Normally open for strike locks and electric gate systems. Normally closed for magnetic locks.
Calling Settings
Calling time
Calling by list
Incoming call
Calling time
(30) seconds
Sets the time unit will spend calling a number before stopping and dialling the next. Use this to avoid voicemail or answering machines from picking up.
Calling by list
On
Enabling will allow users to view list of residents names with an on-screen directory, pressing * and # to scroll.
Incoming call
Auto answer: Off
Wait rings: 3
Ringer: Off
Enable incoming call if you wish to enable the unit to receive an incoming call. This can be used to allow residents to call the guard, and allow users to open the door by calling.
SMS Settings
SMS settings
SMS Settings
On
Enable to allow remote programming by SMS text message.

8. Testing

The unit should now be ready for testing.

1) Enter a test apartment number or select the test number from the on screen directory if it is enabled, and press call.
2) The unit should now be dialling the number.
3) Answer the phone, and check there is 2 way speech.
4) Press the * button. The screen should display: ”The door is opened” and the relay should click.

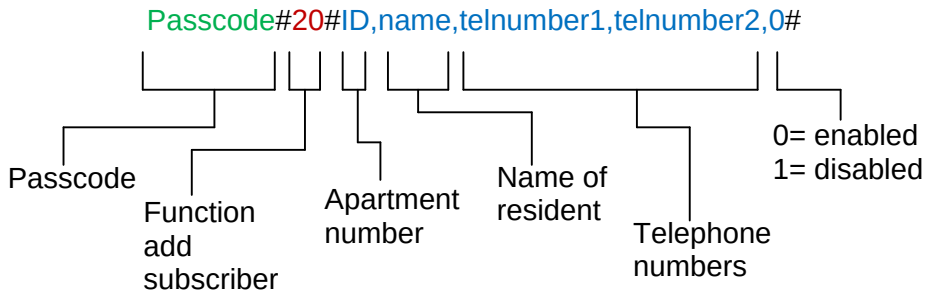
9. SMS Programming

This system is capable of being programmed remotely by SMS. This is useful for adding or changing numbers particularly on an on-going basis.

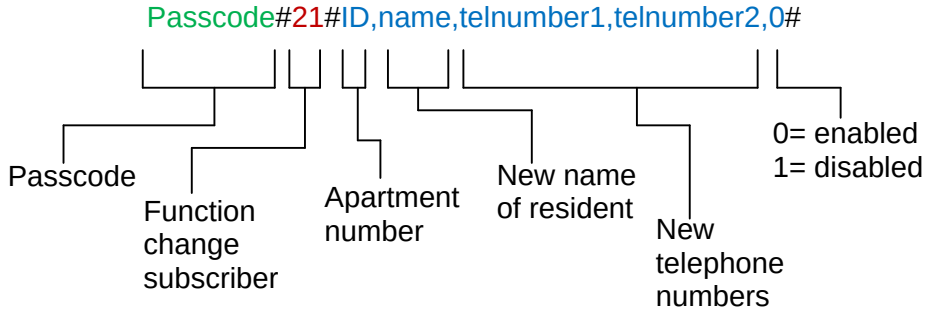
Each SMS text must start with the pass code, followed by a #, followed by a command, followed by a #, followed by data in the following format..

Passcode#command#data#

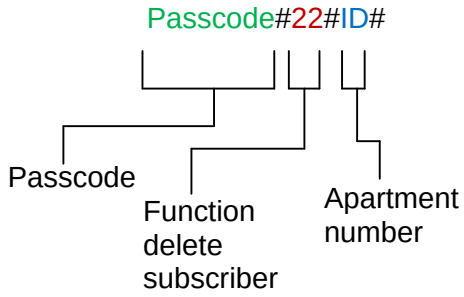
9.1 Add a subscriber



9.2 Change a subscriber



9.3 Delete a subscriber



Additional SMS commands are shown below (SMS format assumes the standard default 123456 manager code has not been changed. If it has, replace this with the new code.

Description	Format of SMS	Comment	Default
Restore default passcode	123456#01#123456#		123456
Change passcode	123456#02#newcode#	6 digit code	N/A
Set managers phone number	123456#03#phonenumber#		N/A
Set talking time	123456#09#?#	? = minutes, 1-99.	3 mins
Set door open by password	123456#12#1#password#	1 = enable, 0 = disable	N/A
Set door open time	123456#13#?#	? = seconds, (2-99 sec)	3 secs
Set door relay type	123456#14#?#	0 = N/O, 1 = N/C	0 (N/O)
Set calling time	123456#15#??#	?? = seconds (25-99)	25
Calling list enable / disable	123456#16#?#	0=disabled, 1=enabled	0
Enquire subscriber	123456#23#?#	? = apartment address	N/A

10. Installation

You may now install the system onsite at the customer location and re-test the features. If the unit experiences problems onsite, this will likely be due to insufficient reception, or excessive power cable length.

TIP: Keep the antenna higher than the speech unit. This will reduce likelihood of radiation from the antenna distorting the audio quality.

11. Operation

Directory calling – If this is enabled, the visitor can press * or # to scroll through resident names and select the person they wish to speak to.

Apartment number calling – If the visitor knows the apartment number they wish to call, they can enter that apartment number on the keypad and press call. The resident can speak with the visitor and press * on their telephone keypad to grant access.

Keypad access – If enabled, residents can enter a code on the keypad in order to gain access. Enter the code followed by F1.

Calling by phone access – If enabled, the intercom can be called from a phone. When it answers the call, if the * key is pressed, the door will open.

Call the manager / reception – If a manager number is entered, pressing the call button will directly call the managers phone number.

12. Factory Default

The default settings can be restored on the unit by the following means.
Caution, factory default will clear all telephone numbers and subscriber names from the unit.

Press…
F2 * * * # # # Call

13. Fault finding

Q: The unit will not power up.
A: Check with a multi-meter the voltage on the terminals and check polarity.

Q: The unit is showing no carrier or no SIM.
A: Check the SIM card is seated correctly. Switch off power, remove and re-insert SIM carefully. Check the SIM has credit, can make and receive calls in a cell phone, and is not locked to a cell phone nor has a pin code request on it.

Q: The unit is leaving voicemail on users phones.
A: If users are pressing end call, the unit will automatically connect to the voicemail. If they want it to call the second number, they should simply ignore the call. If this is not the problem, decrease the timing of the “Calling Time” as per instructions.

Q: The unit is calling users, but when they press the * key the lock is not operating.
A: If you can hear the relay clicking when the * key is pressed, then the unit is working normally. The problem will then be with the wiring between the relay and the lock or gate system. Consult with a professional door or gate install company to ensure it is wired according to local fire, safety and electrical standards.

Q: The unit is calling users, but the relay does not click when they press * key.
A: Please verify that the user is indeed pressing the * key as many users get this mixed up with the # key on their phone. Check reception level. If reception is poor DTMF analogue tones may not work. Take steps to improve reception.

Q: Audio buzzing can be heard on user's phones.
A: Reduce the microphone gain on the door phone. Increase the height of the antenna, or move it further from the door station. Change network to improve reception. Low reception will cause increased radiation from the antenna, affecting the microphone audio quality.

SELF INSTALL - NEED TECHNICAL ASSISTANCE?

OPTION 1: DIRECT WITH THE SERVICE DESK – QUICKEST AND MOST EFFECTIVE METHOD

Submit your enquiry direct with the service desk at – service@automaticsolutions.com.au
The service desk has the most experienced staff in Australia to help with your problem but they need your help.

- **Describe your problem in detail and as clearly as possible. Don't forget to include a telephone number.**
- **Be certain to detail which model or models of you are working with.**
- **Send photos of the installation – they love photos. The people at the service desk are good but they are even better when they can see the installation. Send photos of the overall scene so they can see the entire installation. Also send photos of the wiring to the control board and any other part of the installation you think is relevant.**
- **Send video if appropriate. Smartphone's these days take remarkably good video in small file sizes which can be emailed in a moment. If your problem needs a video to show the issue please feel free to send it.**

NOTE: THIS IS BY FAR THE FASTEST AND MOST SUCCESFUL WAY TO SOLVE YOUR PROBLEM
PHOTOS AND VIDEOS ARE THE NEXT BEST THING TO BEING THERE

OPTION 2: LODGE YOUR ENQUIRY LOCALLY - SLOWER BUT CAN STILL BE EFFECTIVE

Make contact with the store of purchase. Branch staffs are typically not technicians and dependent on their length of service will have varying degrees of technical knowledge. If they cannot help however they will certainly either source help locally from their technicians or make contact with the service technicians on your behalf.

OPTION 3: SERVICE CALL WITH AUTOMATIC SOLUTIONS TECHNICIAN – SLOWEST METHOD

If you fall within the local branch service area it may be possible to book a local technician to look at your installation. Wait times will vary dependent on local workloads. The cost is a service fee which includes the first half hour and the hourly rate thereafter. If any Automatic Solutions provided parts are found to be defective and within warranty these will be provided free of charge.
(NOTE: If you suspect that any parts are defective and within warranty you may wish to consider option 4)

A note on this option: If you decide on this option you will be asked to sign an "authorisation to proceed" which will provide legal authority and payment security. This form has three options available of which only the first two are available to you. The third option is for warranty repairs only for full install customers. Self install customers requiring warranty only service need to refer to option four below.

IMPORTANT: IN SHORT THIS OPTION WILL INCUR CHARGES

OPTION 4: RETURN THE PRODUCT IF BELIEVED TO BE FAULTY

As a self install customer who has purchased product if you believe the product to be faulty rather than an installation or site problem you have the option of returning the product for evaluation and to exercise your right to a replacement, repair or refund as applicable. All returned product is forwarded immediately to the service technicians for evaluation and response. There are two main methods available to return product –

- **Direct to the service centre – this is the quickest method as it cuts out the branch delay**
- **Via the branch of purchase – slower because of the delay at the branch**

When choosing this option you need to complete a product return form. This form gives you all the information on procedure involved and where to send to. These are available at the branch of purchase, can be emailed to you (contact your branch), or available here - http://automaticsolutions.com.au/page/warranty.php